

1. A barrier device, comprising:

a top wall, a bottom wall, opposed end walls and opposed side walls interconnected to collectively form a hollow interior;

at least one opening extending through said hollow interior from  
5 one of said side walls to the other of said side walls;

a barrier reinforcement structure including a first beam  
extending along one of said side walls, a second beam extending along  
said other side wall and a mounting device which extends through said  
at least one opening in said hollow interior and connects to each of said  
10 first and second beams.

2. The barrier device of claim 1 in which said at least one opening  
comprises a first opening and a second opening spaced from said first  
opening, said first and second openings being adapted to receive the  
tines of a fork lift.

3. The barrier device of claim 1 in which each of said first and  
second beams is a box beam having a generally square cross section.

4. The barrier device of claim 1 in which said mounting device is a  
bracket inserted within said at least one opening, said bracket having a  
first end protruding from one side wall and a second end protruding from  
the other side wall, said first beam being connected to said protruding

5 first end of said bracket and said second beam being connected to said protruding second end of said bracket.

5. The barrier device of claim 4 in which said at least one opening forms a channel within said hollow interior, said bracket comprising a plate having opposed sides and said first and second ends, and a pair of arms each mounted to one of said sides of said plate, said arms resting  
5 atop a wall formed by said channel in said hollow interior and providing a space between said plate and said wall to permit the insertion of the tines of a fork lift while said bracket remains in place within said channel.

6. The barrier device of claim 1 in which said mounting device comprises cooperating telescoping members extending from each of said first and second beams through said at least one opening in said hollow interior.

7. The barrier device of claim 6 in which a sleeve is connected generally perpendicularly to said first beam, and an arm is connected generally perpendicularly to said second beam, said sleeve and said arm extending into said at least one opening in said hollow interior with said  
5 arm telescoping into said sleeve to connect said first and second beams together.

8. The barrier device of claim 1 in which each of said top wall, bottom wall, opposed side walls and opposed end walls has an inner surface within said hollow interior, each of said inner surfaces mounting a layer of foam material.

9. The barrier device of claim 8 in which said layer of foam material has a thickness in the range of about 0.5 to 6 inches.

10. The barrier device of claim 1 in which said hollow interior is substantially filled with a foam material.

11. A barrier device, comprising:

a top wall, a bottom wall, opposed end walls and opposed side walls interconnected to collectively form a hollow interior;

5 a first opening and a spaced, second opening each extending through said hollow interior from one of said side walls to the other of said side walls;

a first bracket carried within said first opening and a second bracket carried within said second opening, each of said first and second brackets having a first end protruding from one side wall and an  
10 opposite, second end protruding from the other side wall;

a first beam extending along said one side wall and mounted to said protruding first ends of said first and second brackets, and a second beam extending along said other side wall and mounted to said protruding second ends of said first and second brackets.

12. The barrier device of claim 11 in which each of said first and second beams is a box beam having a generally square cross section.

13. The barrier device of claim 11 in which said first and second openings each form a channel within said hollow interior, said bracket comprising a plate having opposed sides and said first and second ends, and a pair of arms each mounted to one of said sides of said plate, said  
5 arms resting atop a wall formed by said channel in said hollow interior and providing a space between said plate and said wall to permit the

insertion of the tines of a fork lift while said bracket remains in place within said channel.

14. The barrier device of claim 11 in which each of said top wall, bottom wall, opposed side walls and opposed end walls has an inner surface within said hollow interior, each of said inner surfaces mounting a layer of foam material.

15. The barrier device of claim 14 in which said layer of foam material has a thickness in the range of about 0.5 to 6 inches.

16. The barrier device of claim 11 in which said hollow interior is substantially filled with a foam material.

17. A barrier device, comprising:

a top wall, a bottom wall, opposed end walls and opposed side walls interconnected to collectively form a hollow interior;

a first opening and a spaced, second opening each extending  
5 through said hollow interior from one of said side walls to said other side wall;

a first beam located along one of said side walls, a pair of spaced sleeves extending generally perpendicularly to said first beam, a second beam located along the other of said side walls, a pair of spaced arms  
10 extending generally perpendicularly to said second beam, said arms being dimensioned to be inserted within said sleeves;

said sleeves of said first beam each extending through one of said first and second openings in position to telescopically receive one of said arms of said second beam so that said first and second beams are  
15 connected together along said opposed side walls.

18. The barrier device of claim 17 in which each of said top wall, bottom wall, opposed side walls and opposed end walls has an inner surface within said hollow interior, each of said inner surfaces mounting a layer of foam material.

19. The barrier device of claim 18 in which said layer of foam material has a thickness in the range of about 0.5 to 6 inches.

20. The barrier device of claim 17 in which said hollow interior is substantially filled with a foam material.

21. A barrier wall, comprising:

a number of individual barrier devices connected end-to-end, each of said barrier devices including:

(i) a top wall, a bottom wall, opposed end walls and  
5 opposed side walls interconnected to collectively form a hollow interior;

(ii) at least one opening extending through said hollow interior from one of said side walls to the other of said side walls;

(iii) a barrier reinforcement structure including a first  
10 beam extending along one of said side walls, a second beam extending along said other side wall and a mounting device which extends through said opening in said hollow interior and connects to each of said first and second beams;

connecting structure located at each end of said first beam and  
15 said second beam of each barrier device, said connecting structure being effective to connect said first beam of one barrier device to said first beam of an adjacent barrier device and said second beam of said one barrier device to said second beam of said adjacent barrier device.

22. The barrier wall of claim 21 in which said mounting devices of each of said barrier devices is a bracket inserted within said at least one opening, said bracket having a first end protruding from one side wall  
5 and a second end protruding from the other side wall, said first beam



being connected to said protruding one end of said bracket and said second beam being connected to said protruding other end of said bracket.

23. The barrier wall of claim 22 in which said at least one opening forms a channel within said hollow interior bracket comprising a plate having opposed sides and said first and second ends, and a pair of arms each mounted to one of said sides of said plate, said arms resting atop a  
5 wall formed by said channel in said hollow interior, and providing a space between said plate and said wall to permit the insertion of the tines of a fork lift while said bracket remains in place within said channel.

24. The barrier device of claim 21 in which said mounting devices of each of said barrier devices comprise cooperating telescoping members extending from each of said first and second beams through said at least one opening in said hollow interior.

25. The barrier wall of claim 24 in which a sleeve is connected generally perpendicularly to said first beam, and an arm is connected generally perpendicularly to said second beam, said sleeve and said arm  
5 extending into said at least one opening in said hollow interior with said arm telescoping into said sleeve to connect said first and second beams.

26. The barrier wall of claim 21 in which said connecting structure comprises a connector bar inserted within and connected to one end of each of said first and second beams of each barrier device, said connector bar protruding from said one end of said first and second beams of one  
5 barrier device and being inserted into and mounted within an end of the first and second beams of an adjacent barrier device to interconnect said barrier devices.

27. The barrier wall of claim 21 in which said first and second beams of each of said barrier devices have opposed ends, said connecting structure including an extension formed at one end of each of said first and second beams of each barrier device, said extensions having a  
5 smaller cross-sectional area than the other end of said first and second beams, said extensions of said first and second beams of one barrier device being inserted within and connected to said other ends of the first and second beams of an adjacent barrier device to connect the two barrier devices together.

28. The barrier wall of claim 21 in which said top wall, bottom wall, opposed end walls and opposed side walls of each barrier device has an inner surface within said hollow interior, each of said inner surfaces mounting a layer of foam material.

29. The barrier wall of claim 28, in which said layer of foam material has a thickness in the range of about 0.5 to 6 inches.

30. The barrier wall of claim 21 in which said hollow interior of each barrier device is substantially filled with a foam material.

31. A barrier device, comprising:

a top wall, a bottom wall, opposed end walls and opposed side walls interconnected to collectively form a hollow interior;

a seat formed in each of said side walls;

5 a barrier reinforcement structure including a first beam mounted within said seat in one of said side walls, and a second beam mounted within said seat in the other of said side walls.

32. The barrier device of claim 31 in which said seat in each of said side walls extends along the length of said side walls between said opposed end walls.

33. The barrier device of claim 31 in which each of said first and second beams is a box beam having a generally square cross section with a hollow interior.

34. The barrier device of claim 31 in which each of said side walls has an inner surface within said hollow interior and an outer surface spaced from said inner surface, each of said seats having a generally square cross section and extending inwardly from said outer surface.

35. The barrier device of claim 31 in which each of said first and second beam is a generally rectangular-shaped slat.

36. The barrier device of claim 35 in which each of said side walls has an inner surface within said hollow interior and an outer surface spaced from said inner surface, each of said seats having a generally rectangular cross section and extending inwardly from said outer  
5 surface.

37. A barrier wall, comprising:

a number of individual barrier devices connected end-to-end, each of said barrier devices including:

5 (i) a top wall, a bottom wall, opposed end walls and opposed side walls interconnected to collectively form a hollow interior;

(ii) a seat formed in each of said side walls;

10 (iii) a barrier reinforcement structure including a first beam mounted within said seat in one of said side walls, and a second beam mounted within said seat in the other of said side walls;

connecting structure located at each end of said first beam and said second beam of each barrier device, said connecting structure being effective to connect said first beam of one barrier device to said first beam of an adjacent barrier device and said second beam of said one barrier device to said second beam of said adjacent barrier device.

38. The barrier wall of claim 37 in which each of said first and second beams is a generally rectangular-shaped slat.

39. The barrier wall of claim 38 in which each of said side walls has an inner surface within said hollow interior and an outer surface spaced from said inner surface, each of said seats having a generally

rectangular cross section and extending inwardly from said outer  
5 surface.

40. The barrier wall of claim 38 in which said slats mounted to said side walls of each of said barrier devices have opposed ends which protrude beyond said end walls of said barrier devices, said connecting structure including a throughbore formed in the protruding ends of said  
5 slats of each barrier device, said throughbore in said slat of one barrier device aligning with said throughbore in said slat of an adjacent barrier device in position to receive a connector extending through said throughbores to secure said slats together.

41. The barrier wall of claim 37 in which each of said first and second beams is a box beam having a generally square cross section with a hollow interior.

42. The barrier wall of claim 41 in which each of said side walls has an inner surface within said hollow interior and an outer surface spaced from said inner surface, each of said seats having a generally square cross section and extending inwardly from said outer surface.

43. The barrier wall of claim 41 in which said box beams mounted to said side walls of each of said barrier devices have opposed ends which protrude beyond said end walls of said barrier devices, said connecting

structure including a bracket extending between the protruding end of a  
5 box beam of one barrier device and the protruding end of a box beam of  
an adjacent barrier device to connect said box beams together.

44. The barrier wall of claim 43 in which said bracket comprises a  
first plate and a second plate each extending between said protruding  
ends of said box beams of adjacent barrier devices, said first and second  
plates being spaced from one another, a first connector extending  
5 through said protruding end of said box beam of one barrier device and  
mounting to each of said first and second plates and a second connector  
extending through said protruding end of said box beam of an adjacent  
barrier device and mounting to each of said first and second plates.

45. The barrier wall of claim 41 in which said box beams mounted to  
said side walls of each of said barrier devices have opposed ends which  
protrude beyond said end walls of said barrier devices, said connecting  
structure comprising a hitch device including a first U-shaped member  
5 mounted to the protruding end of a box beam of one barrier device, a  
second U-shaped member mounted to the protruding end of a box beam  
of an adjacent barrier device and a coupler connecting said first and  
second U-shaped members.